STS-111 POST LAUNCH PAD DEBRIS INSPECTION REPORT KSC Debris Team 05 June 2002

The post launch inspection of the MLP-1, Pad A FSS, north flame trench, and Pad A apron was conducted on 05 June 2002 from Launch + 1.5 to 3.0 hours(1900 to 2030 EST).

No flight hardware was found.

Orbiter liftoff lateral acceleration data to predict stud hang-ups received from Boeing-Huntington Beach and reported as inconclusive, data reevaluation is in work. Inspection was performed and the south holddown studs were visually assessed as having no indication of hang-up. Erosion was typical for both the north and south posts. North holddown post blast covers and T-0 umbilical exhibited nominal exhaust plume damage. Both SRB aft skirt GN2 purge lines were intact and erect, protective tape layering was partially eroded on both the RH and LH sides.

The LO2 and LH2 Tail Service Masts (TSM) appeared undamaged with both bonnets observed to have closed properly. The MLP deck was generally in good shape.

The GH2 vent line latched on the eighth of eight teeth on the latching mechanism. The vent line was located in a 'centered' position in the latching mechanism. The GUCP 7-inch quick disconnect probe was accessible for inspection and appeared to be undamaged with sealing surface in good shape. The deceleration cable was in nominal configuration, and the vent line blanket was sooted and torn. Film review should provide additional data for the assessment of vent line retract position.

The OAA appeared to be intact with no evidence of plume impingement. All slidewire baskets were secured with no evidence of damage.

The GOX vent arm, ducts and structure appeared to be in nominal condition. The GOX vent seals were inspected and found to be in good shape with only slight indication of ET paint residue present.

Debris findings included:

- FSS 115' level had an OTV camera pointed in the 'straight up' direction
- FSS 235' level 'Do Not Operate' tag that had been taped to preclude debris concern had the tape and tag heat shrunk and remain attached.

Overall damage to the pad appeared to be normal.

Robert Speece NASA-KSC Bill Richards USA-KSC

Scott Otto Lockheed-Martin LSS

Tony Crisafulli Boeing Integration